NOVEMBER/DECEMBER 2023

23PMB11 — GENERAL MICROBIOLOGY AND MICROBIAL DIVERSITY

Time: Three hours

Maximum: 75 marks

LIBRARY CO

SECTION A — $(10 \times 2 = 20 \text{ marks})$

Answer ALL the questions.

- 1. Define animalcules.
- 2. What is ocular lens?
- 3. What is pleomorphic bacteria?
- 4. Define gliding bacteria.
- 5. What is epiphytic algae?
- 6. Define cosmopolitan distribution.
- 7. What is axenic culture?
- 8. Define disinfectant.
- 9. Define halophiles.
- 10. Define habitat.

SECTION B — $(5 \times 5 = 25 \text{ marks})$

Answer ALL the questions.

11. Explain the scope of Microbiology. (a)

- Describe the principle and applications of dark field microscope.
- 12. Give an account on distribution of fungi. (a)

- Write notes on actinomycetes.
- 13. Describe the haplontic lifecycle in algae.

Or

- Explain briefly about the range of vegetative structure in phaeophyceae.
- 14. (a) Give an account of the radiation used in sterilization.

Or

- Comment on roll tube method of anaerobic culture.
- 15. Define biodiversity. Classify the types of biodiversity.

Or

Explain adaptive the mechanism of alkalophiles.

SECTION C — $(3 \times 10 = 30 \text{ marks})$

Answer any THREE questions.

- 16. Give account of the principle and instrumentation of electron microscope.
- 17. Define growth. Discuss the different phases of growth curve.
- Write an essay on economic importance of algae.

Give an elaborate account on various mode of preservation of microbes.

Explain about extreme halophilic archea.